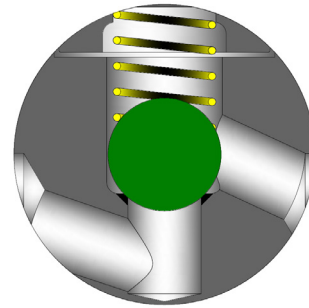
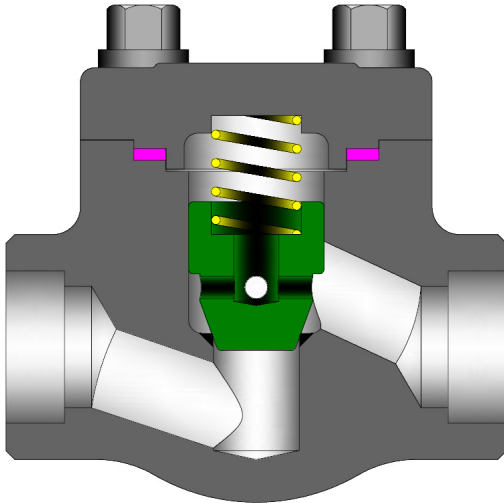


API 602 PISTON CHECK VALVES

FORGED CARBON, STAINLESS STEEL OR ALLOY STEEL
1/4" - 2" (6 - 50mm), ASME CLASSES 150 - 2680



Class	Bore	Fig. No.	
		Piston	Ball
150	Standard	PC01	BC01
	Full	PCL1	BCL1
300	Standard	PC03	BC03
	Full	PCL3	BCL3
600	Standard	PC06	BC06
	Full	PCL6	BCL6
800	Standard	PC08	BC08
	Full	PCL8	BCL8
1500	Standard	PC15	BC15
	Full	PCL5	BCL5
1680	Standard	PC16	BC16
2500	Standard	PC25	BC25
2690	Standard	PC26	BC26

DESIGN FEATURES:

- Standard trim is stellite faced seat integral to the body and 13% chrome disc/ball (API trim 8). Other trims available on request.
- Seat faces lapped for smooth finish and superior sealing.
- Wall thickness per heavy wall API 602 requirements.
- Each valve is shell and seat pressure tested per industry standard API 598.
- Check valve are suitable for service in horizontal line with cap vertical.
- End Flanges have the following raised faces per ASME B16.5:
Classes 150-300: 1/16" (2mm).
Classes 600: 1/4" (7mm).
- Other available options as follows:
 - » Alternate valve materials such as chrome and stainless steel alloys.
 - » Alternate trim materials.
 - » NACE service.
 - » Special cleaning for applications such as oxygen or chlorine.
 - » Other options available as specified.

STANDARD MATERIALS (Other materials available)

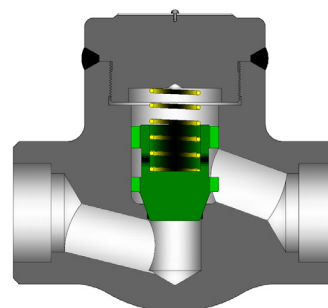
PART	MATERIALS			
Body	A105 + Stellite 6 Faced	A182 F11 + Stellite 6 Faced	A182 F22 + Stellite 6 Faced	A182 F316 (1)
Cap	A105	A182 F11	A182 F22	A182 F316
Disc/Ball	A276 T420			A276 T316
Gasket (2)	Spiral Wound SST with Graphite			Spiral Wound SST with PTFE
Spring	Inconel 625			
Body / Cap Bolting (2)	A193 Gr. B7	A193 Gr. B16		A193 Gr. B8M
Identification Plate	Series 300 SST			

1. Threaded and weld end valve bodies A182 F316L
2. Welded bonnets also available.

NOTE: See page 43 for flow, safety and maintenance information.

Design Specifications

Item	Applicable Specification
Wall thickness	API 602
Pressure - temperature ratings	ASME B16.34
General valve design	API 602 & B16.34
End to End dimensions	ASME B16.10
Flange design	ASME B16.5
Thread design	ASME B1.20.1
Butt Weld design	ASME B16.25
Socket Weld design	ASME B16.11
Materials	ASTM



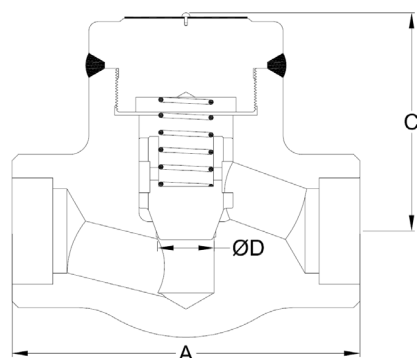
Welded Bonnet Design

PISTON CHECK VALVE DIMENSIONS

(CLASSES 150 - 800)

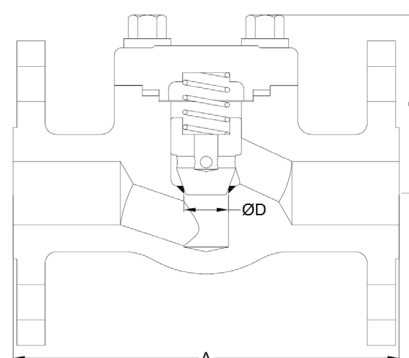
SIZE	ASME 150			ASME 300			ASME 600		
	Bolted Bonnet			Bolted Bonnet			Bolted Bonnet		
	Standard Bore			Standard Bore			Standard Bore		
in	A	C	D	A	C	D	A	C	D
mm	FE			FE			FE		
½	4.25	2.2	0.39	6	2.2	0.39	6.5	2.2	0.39
13	108	55	10	152	55	10	165	55	10
¾	4.62	2.2	0.5	7	2.2	0.5	7.5	2.2	0.5
19	117	55	13	178	55	13	190	55	13
1	5	2.8	0.69	8	2.8	0.69	8.5	2.8	0.69
25	127	72	18	203	72	18	216	72	18
1¼	5.5	3.2	0.91	8.5	3.2	0.91	9	3.2	0.91
32	140	81	23	216	81	23	229	81	23
1½	6.5	3.6	1.12	9	3.7	1.12	9.5	3.7	1.12
38	165	91	29	229	94	29	241	94	29
2	8	4.4	1.26	10.5	4.4	1.38	11.5	4.4	1.38
50	203	112	32	267	112	35	292	112	35

SIZE	ASME 800											
	Bolted Bonnet						Welded Bonnet					
	Standard Bore			Full Bore			Standard Bore			Full Bore		
in	A	C	D	A	C	D	A	C	D	A	C	D
mm	WE			WE			WE			WE		
¼	3.11	2.2	0.26	-	-	-	3.11	2.2	0.26	-	-	-
6	79	55	7	-	-	-	79	55	7	-	-	-
3/8	3.11	2.2	0.39	-	-	-	3.11	2.2	0.39	-	-	-
10	79	55	10	-	-	-	79	55	10	-	-	-
½	3.11	2.2	0.39	3.62	2.2	0.5	3.11	2.2	0.39	3.62	2.2	0.5
13	79	55	10	92	55	13	79	55	10	92	55	13
¾	3.62	2.2	0.5	4.37	3	0.69	3.62	2.2	0.5	4.37	3	0.69
19	92	55	13	111	72	18	92	55	13	111	72	18
1	4.37	3	0.69	4.72	3.2	0.91	4.37	3	0.69	4.72	3.2	0.91
25	111	72	18	120	81	23	111	72	18	120	81	23
1¼	4.72	3.2	0.91	5.98	3.7	1.12	4.72	3.2	0.91	5.98	3.7	1.12
32	120	81	23	152	94	29	120	81	23	152	94	29
1½	5.98	3.7	1.12	6.77	4.4	1.4	5.98	3.7	1.12	6.77	4.4	1.42
38	152	94	29	172	112	36	152	94	29	172	112	36
2	6.77	4.4	1.38	8.66	5.2	1.85	6.77	4.4	1.38	8.66	5.2	1.85
50	172	112	35	220	132	47	172	112	35	220	132	47



Welded Bonnet Socket Weld Ends Design

WE = Socket Weld / Threaded Ends
FE = Flanged Ends
C = Center to top



Bolted Bonnet Flanged Ends Design

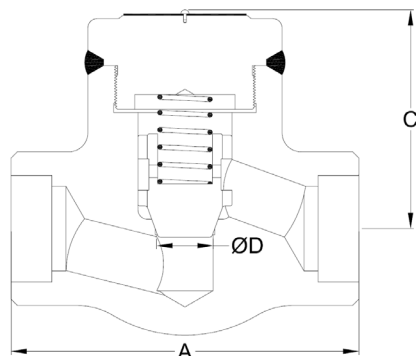
ADDITIONAL SIZES, MATERIALS AND CLASSES AVAILABLE UPON REQUEST.

PISTON CHECK VALVE DIMENSIONS

(CLASSES 1500 - 2680)

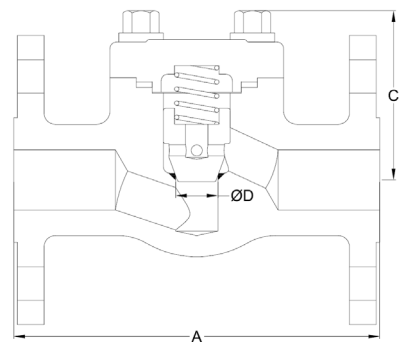
SIZE	ASME 1500 & 1690												
	Bolted Bonnet						Welded Bonnet						
	Standard Bore			Full Bore			Standard Bore			Full Bore			
in	A		C	D	A	C	D	A	C	D	A	C	D
mm	FE	WE			WE			WE			WE		
¼	-	3.11	2.9	0.26	-	-	-	3.11	2.9	0.39	-	-	-
6	-	79	73	7	-	-	-	79	73	10	-	-	-
3/8	-	3.11	2.9	0.39	-	-	-	3.11	2.9	0.5	-	-	-
10	-	79	73	10	-	-	-	79	73	13	-	-	-
½	8.5	3.62	2.9	0.39	4.37	2.9	0.5	3.62	2.9	0.39	4.37	2.9	0.5
13	216	92	73	10	111	73	13	92	73	10	111	73	13
¾	9	4.37	2.9	0.5	4.72	3.3	0.69	4.37	2.9	0.51	4.72	3.3	0.69
19	229	111	73	13	120	84	18	111	73	13	120	84	18
1	10	4.72	3.3	0.69	5.98	3.8	0.91	4.72	3.3	0.69	5.98	3.8	0.91
25	254	120	84	18	152	97	23	120	84	18	152	97	23
1¼	11	5.98	3.8	0.91	6.77	4.5	1.12	5.98	3.8	0.91	6.77	4.5	1.12
32	279	152	97	23	172	115	29	152	97	23	172	115	29
1½	12	6.77	4.5	1.12	8.66	5.2	1.38	6.77	4.5	1.12	8.66	5.2	1.38
38	305	172	115	29	220	132	35	172	115	29	220	132	35
2	14.5	8.66	5.2	1.38	9.84	5.2	1.85	8.66	5.2	1.38	10.24	5.2	1.85
50	368	220	132	35	250	132	47	220	132	35	260	132	47

SIZE	ASME 2500 & 2680					
	Bolted Bonnet			Welded Bonnet		
	Standard Bore			Standard Bore		
in	A	C	D	A	C	D
mm	WE			WE		
½	5.91	4	0.43	5.91	5.3	0.55
13	150	102	11	150	135	14
¾	5.91	4	0.43	5.91	5.3	0.55
19	150	102	11	150	135	14
1	6.69	4.2	0.55	6.69	5.7	0.75
25	170	107	14	170	146	19
1¼	7.87	5	0.63	7.87	6.9	0.98
32	200	128	16	200	176	25
1½	7.87	5	0.98	7.87	6.9	1.1
38	200	128	25	200	176	28
2	9.84	5.6	1.1	9.84	7.7	1.38
50	250	143	28	250	196	35



Welded Bonnet Socket Weld Ends Design

WE = Socket Weld / Threaded Ends
FE = Flanged Ends
C = Center to top open



Bolted Bonnet Flanged Ends Design

ADDITIONAL SIZES, MATERIALS AND CLASSES AVAILABLE UPON REQUEST.

API 602 PISTON CHECK VALVES

FORGED CARBON, STAINLESS STEEL OR ALLOY STEEL

1/4" - 2" (6 - 50mm), ASME CLASSES 150 - 2680

SIZE	ASME 150			ASME 300			ASME 600			ASME 800											
	Bolted Bonnet			Bolted Bonnet			Bolted Bonnet			Bolted Bonnet						Welded Bonnet					
	Standard Bore			Standard Bore			Standard Bore			Standard Bore			Full Bore			Standard Bore			Full Bore		
in	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV
mm	FE	KG		FE	KG		FE	KG		WE	KG		WE	KG		WE	KG		WE	KG	
¼	-	-	-	-	-	-	-	-	-	3.3	0.7	-	-	3.1	0.7	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	1.5	-	-	-	1.4	-	-	-	-	-	-	-
3/8	-	-	-	-	-	-	-	-	-	3.3	1.5	-	-	3.1	1.5	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	1.5	-	-	-	1.4	-	-	-	-	-	-	-
½	7.5	1.5	-	8.2	1.5	-	7.5	1.5	-	3.1	1.5	-	4.2	2.6	-	3.1	1.5	-	4.2	2.6	-
13	3.4	-	-	3.7	-	-	3.4	-	-	1.4	-	-	1.9	-	-	1.4	-	-	1.9	-	-
¾	9.7	2.7	-	10.6	2.7	-	12.8	2.7	-	4.2	2.7	-	5.7	4.9	-	4	2.7	-	5.7	4.9	-
19	4.4	-	-	4.8	-	-	5.8	-	-	1.9	-	-	2.6	-	-	1.8	-	-	2.6	-	-
1	18.1	5.1	-	19.4	5.1	-	20.9	5.1	-	5.7	5.1	-	9.3	8.9	-	5.7	5.1	-	9.3	8.9	-
25	8.2	-	-	8.8	-	-	9.5	-	-	2.6	-	-	4.2	-	-	2.6	-	-	4.2	-	-
1¼	19.6	9.1	-	21.2	9.1	-	22.9	9.1	-	9.3	9.1	-	11.7	13.7	-	9.3	9.1	-	11.7	13.7	-
32	8.9	-	-	9.6	-	-	10.4	-	-	4.2	-	-	5.3	-	-	4.2	-	-	5.3	-	-
1½	26.5	14	-	30.2	14	-	34.4	14	-	11.7	14	-	19.8	21.9	-	11.7	14	-	19.8	21.9	-
38	12	-	-	13.7	-	-	15.6	-	-	5.3	-	-	9	-	-	5.3	-	-	9	-	-
2	31.5	22.4	-	39.2	22.4	-	54	22.4	-	19.8	22.4	-	34.4	40	-	19.8	22.4	-	34.4	40	-
50	14.3	-	-	17.8	-	-	24.5	-	-	9	-	-	15.6	-	-	9	-	-	15.6	-	-
SIZE	ASME 1500 & 1687											ASME 2500 & 2680									
	Bolted Bonnet						Welded Bonnet					Bolted Bonnet			Welded Bonnet						
	Standard Bore			Full Bore			Standard Bore			Full Bore		Standard Bore			Standard Bore						
in	WT	LB	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	
mm	FE	KG	WE	KG		WE	KG		WE	KG		WE	KG		WE	KG		WE	KG		
¼	-	-	4.9	-	0.7	-	-	-	4.9	-	0.7	-	-	-	-	-	-	-	-	-	-
6	-	-	2.2	-	-	-	-	-	2.2	-	-	-	-	-	-	-	-	-	-	-	-
3/8	-	-	4.9	-	1.5	-	-	-	4.9	-	1.5	-	-	-	-	-	-	-	-	-	-
10	-	-	2.2	-	-	-	-	-	2.2	-	-	-	-	-	-	-	-	-	-	-	-
½	20.7	-	5.3	-	1.5	6.4	-	1.5	5.3	-	1.5	-	6.4	-	1.5	17.6	-	1.8	15.4	-	3
13	9.4	-	2.4	-	-	2.9	-	-	2.4	-	-	-	2.9	-	-	8	-	-	7	-	-
¾	24.7	-	6.4	-	2.7	10.1	-	2.7	6.4	-	2.7	-	10.1	-	2.7	17.2	-	1.9	15	-	3.1
19	11.2	-	2.9	-	-	4.6	-	-	2.9	-	-	-	4.6	-	-	7.8	-	-	6.8	-	-
1	31.7	-	10.1	-	5.1	14.3	-	5.1	10.1	-	5.1	-	14.3	-	5.1	26.5	-	3.2	24.3	-	6
25	14.4	-	4.6	-	-	6.5	-	-	4.6	-	-	-	6.5	-	-	12	-	-	11	-	-
1¼	35.3	-	14.3	-	9.1	23.1	-	9.1	14.3	-	9.1	-	23.1	-	9.1	43	-	4.3	39.7	-	10.5
32	16	-	6.5	-	-	10.5	-	-	6.5	-	-	-	10.5	-	-	19.5	-	-	18	-	-
1½	47.4	-	23.1	-	14	34.4	-	14	23.1	-	14	-	34.4	-	14	42.5	-	10.7	39	-	13.5
38	21.5	-	10.5	-	-	15.6	-	-	10.5	-	-	-	15.6	-	-	19.3	-	-	17.7	-	-
2	61.7	-	34.2	-	22.4	37.5	-	22.4	34.2	-	22.4	-	37.5	-	22.4	59.5	-	14.2	63.9	-	22.4
50	28	-	15.5	-	-	17	-	-	15.5	-	-	-	17	-	-	27	-	-	29	-	-

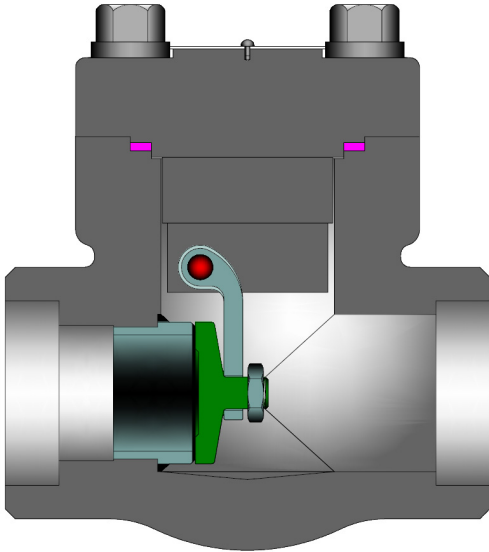
FE = Flanged Ends
WE = Socket Weld / Threaded Ends

WT = Weight
CV = Flow Coefficient

API 602 SWING CHECK VALVES

FORGED CARBON, STAINLESS STEEL OR ALLOY STEEL

1/4" - 2" (6 - 50mm), ASME CLASSES 150 - 2680



Class	Bore	Fig. No.
150	Standard	SW01
	Full	SWL1
300	Standard	SW03
	Full	SWL3
600	Standard	SW06
	Full	SWL6
800	Standard	SW08
	Full	SWL8
1500	Standard	SW15
	Full	SWL5
1680	Standard	SW16
2500	Standard	SW25
2690	Standard	SW26

DESIGN FEATURES:

- Standard trim is stellite faced seat rings and 13% chrome disc (API trim 8). Other trims available on request.
- Seat faces lapped for smooth finish and superior sealing.
- Wall thickness per heavy wall API 602 requirements.
- Swivel disc for improved seat alignment and longer life.
- Each valve is shell and seat pressure tested per industry standard API 598.
- Check valve are suitable for service in horizontal line with cap vertical or in a vertical line with flow upward.
- Carrier Pin is confined within the body wall and is not accessible from the exterior, thus no side body penetrations, eliminating a common leak path.

STANDARD MATERIALS (Other materials available)

PART	MATERIALS			
Body	A105	A182 F11	A182 F22	A182 F316 (1)
Cap	A105	A182 F11	A182 F22	A182 F316
Disc	A276 T420			A276 T316
Seat Ring	SST 410 + Stellite 6 Faced			316 SST
Gasket (2)	Spiral Wound SST with Graphite			Spiral Wound SST with PTFE
Carrier	304 SST			316 SST
Carrier Pin	304 SST			316 SST
Disc Nut	A182 F304 or A194 Gr. 8			A182 F316 or
				A194 Gr. 8M
Body / Cap Bolting (2)	A193 Gr. B7	A193 Gr. B16		A193 Gr. B8M
Identification Plate	Series 300 SST			

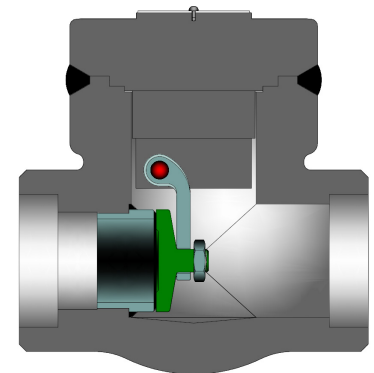
1. Threaded and weld end valve bodies A182 F316L
2. Welded bonnets also available.

NOTE: See page 43 for flow, safety and maintenance information.

Design Specifications

Item	Applicable Specification
Wall thickness	API 602
Pressure - temperature ratings	ASME B16.34
General valve design	API 602 & B16.34
End to End dimensions	ASME B16.10
Flange design	ASME B16.5
Thread design	ASME B1.20.1
Butt Weld design	ASME B16.25
Socket Weld design	ASME B16.11
Materials	ASTM

- End Flanges have the following raised faces per ASME B16.5:
Classes 150-300: 1/16" (2mm).
Classes 600: 1/4" (7mm).
- Other available options as follows:
 - » Alternate valve materials such as chrome and stainless steel alloys
 - » Alternate trim materials
 - » NACE service
 - » Special cleaning for applications such as oxygen or chlorine
 - » Other options available as specified



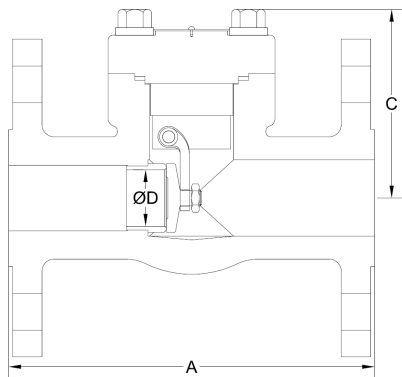
Welded Bonnet Design

SWING CHECK VALVE DIMENSIONS

(CLASSES 150 - 800)

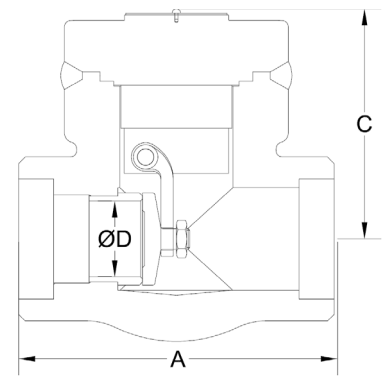
SIZE	ASME 150			ASME 300			ASME 600		
	Bolted Bonnet			Bolted Bonnet			Bolted Bonnet		
	Standard Bore			Standard Bore			Standard Bore		
in	A	C	D	A	C	D	A	C	D
mm	FE			FE			FE		
½	4.25	2.2	0.39	6	2.2	0.39	6.5	2.2	0.39
13	108	55	10	152	55	10	165	55	10
¾	4.62	2.2	0.5	7	2.2	0.5	7.5	2.2	0.5
19	117	55	13	178	55	13	190	55	13
1	5	2.8	0.69	8	2.8	0.69	8.5	2.8	0.69
25	127	72	18	203	72	18	216	72	18
1¼	5.5	3.2	0.91	8.5	3.2	0.91	9	3.2	0.91
32	140	81	23	216	81	23	229	81	23
1½	6.5	3.6	1.12	9	3.7	1.12	9.5	3.7	1.12
38	165	91	29	229	94	29	241	94	29
2	8	4.4	1.26	10.5	4.4	1.38	11.5	4.4	1.38
50	203	112	32	267	112	35	292	112	35

SIZE	ASME 800											
	Bolted Bonnet						Welded Bonnet					
	Standard Bore			Full Bore			Standard Bore			Full Bore		
in	A	C	D	A	C	D	A	C	D	A	C	D
mm	WE			WE			WE			WE		
¼	3.11	2.2	0.26	-	-	-	3.11	2.2	0.26	-	-	-
6	79	55	7	-	-	-	79	55	7	-	-	-
3/8	3.11	2.2	0.39	-	-	-	3.11	2.2	0.39	-	-	-
10	79	55	10	-	-	-	79	55	10	-	-	-
½	3.11	2.2	0.39	3.62	2.2	0.5	3.11	2.2	0.39	3.62	2.2	0.5
13	79	55	10	92	55	13	79	55	10	92	55	13
¾	3.62	2.2	0.5	4.37	3	0.69	3.62	2.2	0.5	4.37	3	0.69
19	92	55	13	111	72	18	92	55	13	111	72	18
1	4.37	3	0.69	4.72	3.2	0.91	4.37	3	0.69	4.72	3.2	0.91
25	111	72	18	120	81	23	111	72	18	120	81	23
1¼	4.72	3.2	0.91	4.72	3.7	1.12	4.72	3.2	0.91	4.72	3.7	1.12
32	120	81	23	120	94	29	120	81	23	120	94	29
1½	4.72	3.7	1.12	5.51	4.4	1.4	4.72	3.7	1.12	5.51	4.4	1.42
38	120	94	29	140	112	36	120	94	29	140	112	36
2	5.51	4.4	1.38	6.3	5.2	1.85	5.51	4.4	1.38	6.3	5.2	1.85
50	140	112	35	160	132	47	140	112	35	160	132	47



Bolted Bonnet Flanged Ends Design

WE = Socket Weld / Threaded Ends
FE = Flanged Ends
C = Center to top



Welded Bonnet Socket Weld Ends Design

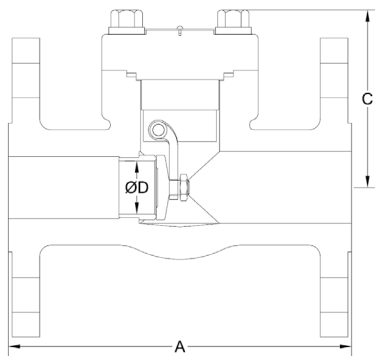
ADDITIONAL SIZES, MATERIALS AND CLASSES AVAILABLE UPON REQUEST.

SWING CHECK VALVE DIMENSIONS

(CLASSES 1500 - 2860)

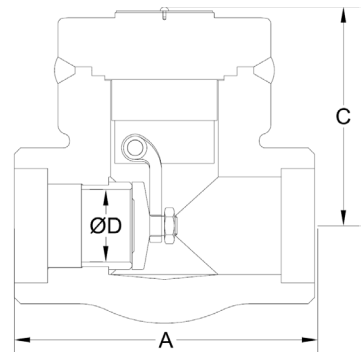
SIZE	ASME 1500 & 1690												
	Bolted Bonnet						Welded Bonnet						
	Standard Bore			Full Bore			Standard Bore			Full Bore			
	in	A		C	D	A	C	D	A	C	D	A	C
mm	FE	WE	WE			WE							
¼	-	3.11	2.9	0.26	-	-	-	3.11	2.9	0.39	-	-	-
6	-	79	73	7	-	-	-	79	65	10	-	-	-
3/8	-	3.11	2.9	0.39	-	-	-	3.11	2.9	0.5	-	-	-
10	-	79	73	10	-	-	-	79	65	13	-	-	-
½	8.5	3.62	2.9	0.39	4.37	2.9	0.5	3.62	2.9	0.39	4.37	2.9	0.5
13	216	92	73	10	111	73	13	92	65	10	111	65	13
¾	9	4.37	2.9	0.5	4.72	3.3	0.69	4.37	2.9	0.51	4.72	3.3	0.69
19	229	111	73	13	120	84	18	111	65	13	120	77	18
1	10	4.72	3.3	0.69	4.72	3.8	0.91	4.72	3.3	0.69	4.72	3.8	0.91
25	254	120	84	18	120	97	23	120	77	18	120	89	23
1¼	11	4.72	3.8	0.91	5.51	4.5	1.12	4.72	3.8	0.91	5.51	4.5	1.12
32	279	120	97	23	140	115	29	120	89	23	140	103	29
1½	12	5.51	4.5	1.12	6.3	5.2	1.38	5.51	4.5	1.12	6.3	5.2	1.38
38	305	140	115	29	160	132	35	140	103	29	160	115	35
2	14.5	6.3	5.2	1.38	8.66	5.2	1.85	6.3	5.2	1.38	8.66	5.2	1.85
50	368	160	132	35	220	152	47	160	115	35	220	132	47

SIZE	ASME 2500 & 2680					
	Bolted Bonnet			Welded Bonnet		
	Standard Bore			Standard Bore		
	in	A	C	D	A	C
mm	WE	WE				
½	5.91	3.4	0.55	5.91	3.4	0.55
13	150	87	14	150	87	14
¾	5.91	3.6	0.55	5.91	3.4	0.55
19	150	92	14	150	87	14
1	6.69	4.4	0.75	6.69	3.6	0.75
25	170	113	19	170	92	19
1¼	7.87	4.4	1.1	7.87	4.4	1.1
32	200	113	28	200	113	28
1½	7.87	5.2	1.1	7.87	4.4	1.1
38	200	131	28	200	113	28
2	9.84	5.9	1.5	9.84	5.2	1.5
50	250	151	38	250	131	38



Bolted Bonnet Flanged Ends Design

WE = Socket Weld / Threaded Ends
FE = Flanged Ends
C = Center to top open



Welded Bonnet Socket Weld Ends Design

ADDITIONAL SIZES, MATERIALS AND CLASSES AVAILABLE UPON REQUEST.

API 602 SWING CHECK VALVES

FORGED CARBON, STAINLESS STEEL OR ALLOY STEEL

1/4" - 2" (6 - 50mm), ASME CLASSES 150 - 2680

SIZE	ASME 150			ASME 300			ASME 600			ASME 800											
	Bolted Bonnet			Bolted Bonnet			Bolted Bonnet			Bolted Bonnet			Welded Bonnet								
	Standard Bore			Standard Bore			Standard Bore			Standard Bore			Full Bore			Standard Bore			Full Bore		
in	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV
mm	FE	KG		FE	KG		FE	KG		WE	KG		WE	KG		WE	KG		WE	KG	
¼	-	-	-	-	-	-	-	-	2.9	0.7	-	-	2.9	0.7	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	1.3	-	-	-	1.3	-	-	-	-	-	-	-	-
3/8	-	-	-	-	-	-	-	-	2.9	1.5	-	-	2.9	1.5	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	1.3	-	-	-	1.3	-	-	-	-	-	-	-	-
½	7.1	1.5	7.7	1.5	7.1	1.5	2.6	1.5	3.7	2.6	2.6	1.5	3.7	2.6	-	-	-	-	-	-	-
13	3.2	-	3.5	-	3.2	-	1.2	-	1.7	-	1.2	-	1.7	-	-	-	-	-	-	-	-
¾	9.3	2.7	10.1	2.7	12.3	2.7	3.7	2.7	5.3	4.9	3.7	2.7	5.3	4.9	-	-	-	-	-	-	-
19	4.2	-	4.6	-	5.6	-	1.7	-	2.4	-	1.7	-	2.4	-	-	-	-	-	-	-	-
1	17.6	5.1	19	5.1	20.5	5.1	5.3	5.1	8.8	8.9	5.3	5.1	8.8	8.9	-	-	-	-	-	-	-
25	8	-	8.6	-	9.3	-	2.4	-	4	-	2.4	-	4	-	-	-	-	-	-	-	-
1¼	19.2	9.1	20.7	9.1	22.5	9.1	8.8	9.1	11.2	13.7	8.8	9.1	11.2	13.7	-	-	-	-	-	-	-
32	8.7	-	9.4	-	10.2	-	4	-	5.1	-	4	-	5.1	-	-	-	-	-	-	-	-
1½	26	14	29.8	14	34	14	11.2	14	19.2	21.9	11.2	14	19.2	21.9	-	-	-	-	-	-	-
38	11.8	-	13.5	-	15.4	-	5.1	-	8.7	-	5.1	-	8.7	-	-	-	-	-	-	-	-
2	31.1	22.4	38.8	22.4	53.6	22.4	19.4	22.4	33.7	40	19.4	22.4	33.7	40	-	-	-	-	-	-	-
50	14.1	-	17.6	-	24.3	-	8.8	-	15.3	-	8.8	-	15.3	-	-	-	-	-	-	-	-
SIZE	ASME 1500 & 1687											ASME 2500 & 2680									
	Bolted Bonnet						Welded Bonnet					Bolted Bonnet			Welded Bonnet						
	Standard Bore			Full Bore			Standard Bore			Full Bore		Standard Bore			Standard Bore						
in	WT	LB	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	
mm	FE	KG	WE	KG		WE	KG		WE	KG		WE	KG		WE	KG		WE	KG		
¼	-	-	4.9	-	0.7	-	-	-	4.4	0.7	-	-	-	-	-	-	-	-	-	-	-
6	-	-	2.2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
3/8	-	-	4.4	-	1.5	-	-	-	4.4	1.5	-	-	-	-	-	-	-	-	-	-	-
10	-	-	2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
½	20.3	4.9	4.9	1.5	6	1.5	4.4	1.5	6	1.5	16.1	1.8	14.3	3	-	-	-	-	-	-	-
13	9.2	-	2.2	-	2.7	-	2	-	2.7	-	7.3	-	6.5	-	-	-	-	-	-	-	-
¾	24.3	6	6	2.7	9.5	2.7	6	2.7	9.5	2.7	16.1	1.9	14.3	3.1	-	-	-	-	-	-	-
19	11	-	2.7	-	4.3	-	2.7	-	4.3	-	7.3	-	6.5	-	-	-	-	-	-	-	-
1	31.3	9.7	9.7	5.1	13.7	5.1	9.7	5.1	13.7	5.1	25.4	3.2	23.1	6	-	-	-	-	-	-	-
25	14.2	4.4	4.4	-	6.2	-	4.4	-	6.2	-	11.5	-	10.5	-	-	-	-	-	-	-	-
1¼	34.8	13.9	13.9	9.1	22.5	9.1	13.9	9.1	22.5	9.1	41.7	4.3	38.6	10.5	-	-	-	-	-	-	-
32	15.8	6.3	6.3	-	10.2	-	6.3	-	10.2	-	18.9	-	17.5	-	-	-	-	-	-	-	-
1½	47	22.7	22.7	14	33.7	14	22.7	14	33.7	14	41.7	10.7	38.6	13.5	-	-	-	-	-	-	-
38	21.3	10.3	10.3	-	15.3	-	10.3	-	15.3	-	18.9	-	17.5	-	-	-	-	-	-	-	-
2	61.3	33.7	33.7	22.4	36.8	22.4	33.7	22.4	36.8	22.4	58.9	14.2	62.8	22.4	-	-	-	-	-	-	-
50	27.8	15.3	15.3	-	16.7	-	15.3	-	16.7	-	26.7	-	28.5	-	-	-	-	-	-	-	-

FE = Flanged Ends

WE = Socket Weld / Threaded Ends

WT = Weight

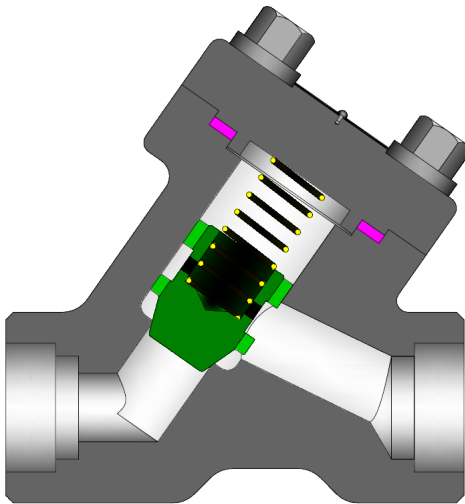
CV = Flow Coefficient

API 602 Y-PATTERN PISTON CHECK VALVES

FORGED CARBON, STAINLESS STEEL OR ALLOY STEEL

1/4" - 2" (6 - 50mm)

ASME CLASSES 800 - 2680



STANDARD MATERIALS (Other materials available)

PART	MATERIALS			
Body	A105 + Stellite 6 Faced	A182 F11 + Stellite 6 Faced	A182 F22 + Stellite 6 Faced	A182 F316 (1)
Cap	A105	A182 F11	A182 F22	A182 F316
Disc/Ball	A276 T420			A276 T316
Gasket (2)	Spiral Wound SST with Graphite			Spiral Wound SST with PTFE
Spring	Inconel 625			
Body / Cap Bolting (2)	A193 Gr. B7	A193 Gr. B16		A193 Gr. B8M
Identification Plate	Series 300 SST			

1. Threaded and weld end valve bodies A182 F316L
2. Welded bonnets also available.

Class	Bore	Fig. No.
800	Standard	YL08
	Full	YLL8
1500	Standard	YL15
	Full	YLL5
1680	Standard	YL16
2500	Standard	YL25
2690	Standard	YL26

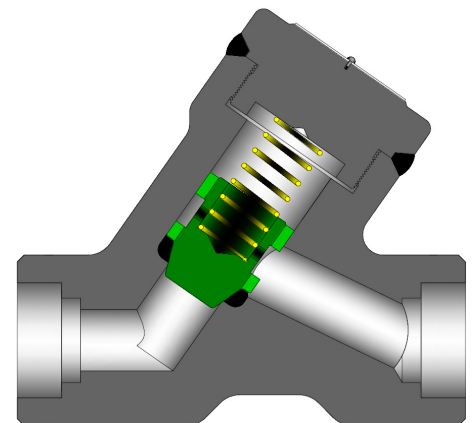
NOTE: See page 43 for flow, safety and maintenance information.

Design Specifications

Item	Applicable Specification
Wall thickness	API 602
Pressure - temperature ratings	ASME B16.34
General valve design	API 602 & B16.34
End to End dimensions	ASME B16.10
Flange design	ASME B16.5
Thread design	ASME B1.20.1
Butt Weld design	ASME B16.25
Socket Weld design	ASME B16.11
Materials	ASTM

DESIGN FEATURES:

- Standard trim is stellite faced seat integral to the body and 13% chrome disc (API trim 8). Other trims available on request.
- Seat faces lapped for smooth finish and superior sealing.
- Wall thickness per heavy wall API 602 requirements.
- Each valve is shell and seat pressure tested per industry standard API 598.
- Check valve are suitable for service in horizontal line with cap vertical or in a vertical line with flow upward.
- End Flanges have the following raised faces per ASME B16.5:
 - Classes 150-300: 1/16" (2mm).
 - Classes 600: 1/4" (7mm).
- Y-Pattern features reduced flow restrictions compared to the upright design.
- Other available options as follows:
 - » Alternate valve materials such as chrome and stainless steel alloys.
 - » Alternate trim materials.
 - » NACE service.
 - » Special cleaning for applications such as oxygen or chlorine.
 - » Other options available as specified.



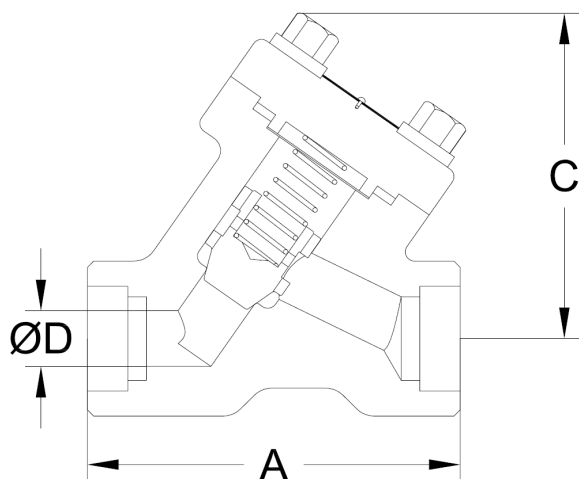
Welded Bonnet Design

Y-PATTERN PISTON CHECK VALVE DIMENSIONS

(CLASSES 800 - 2680)

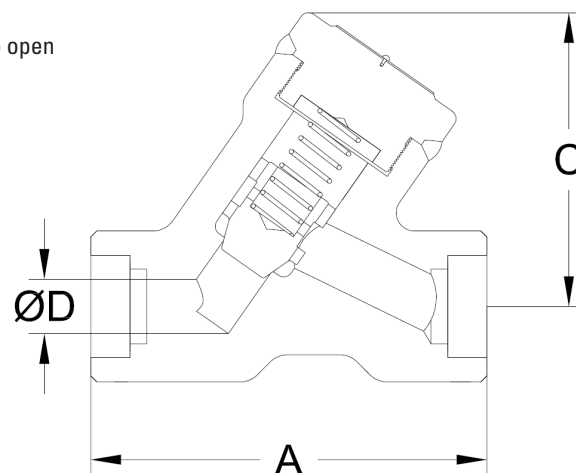
SIZE	ASME 800					
	Bolted Bonnet			Welded Bonnet		
	Standard Bore			Standard Bore		
in	A	C	D	A	C	D
mm	WE			WE		
½	4.17	3.5	0.39	4.17	3	0.39
13	106	88	10	106	77	10
¾	4.17	3.5	0.5	4.17	3	0.5
19	106	88	13	106	77	13
1	4.72	4	0.69	4.72	3.5	0.69
25	120	101	18	120	88	18
1¼	5.98	4.9	0.91	5.98	4.3	0.91
32	152	124	23	152	108	23
1½	5.98	4.9	1.12	5.98	4.3	1.12
38	152	124	29	152	108	29
2	7.09	5.9	1.38	7.09	4.9	1.38
50	180	142	35	180	124	35

SIZE	ASME 1500 & 1690						ASME 2500 & 2680		
	Bolted Bonnet			Welded Bonnet			Welded Bonnet		
	Standard Bore			Standard Bore			Standard Bore		
in	A	C	D	A	C	D	A	C	D
mm	WE			WE			WE		
½	4.72	4.1	0.39	4.72	3.5	0.39	5.98	4.4	0.43
13	120	103	10	120	88	10	152	111	11
¾	4.72	4.1	0.5	4.72	3.5	0.5	5.98	4.4	0.55
19	120	103	13	120	88	13	152	111	14
1	5.98	5	0.69	5.98	4.3	0.69	7.09	5	0.75
25	152	126	18	152	108	18	180	128	19
1¼	5.98	5.7	0.91	5.98	4.3	0.91	7.87	5.7	0.98
32	152	146	23	152	108	23	200	145	25
1½	7.09	5.7	1.12	7.09	4.9	1.12	7.87	5.7	1.1
38	180	146	29	180	124	29	200	145	28
2	7.87	6.6	1.38	7.87	5.7	1.38	9.06	6.3	1.38
50	200	168	35	200	144	35	230	160	35



WE = Socket Weld / Threaded Ends

C = Center to top open



ADDITIONAL SIZES, MATERIALS AND CLASSES AVAILABLE UPON REQUEST.

API 602 Y-PATTERN PISTON CHECK VALVES

FORGED CARBON, STAINLESS STEEL OR ALLOY STEEL

1/4" - 2" (6 - 50mm)

ASME CLASSES 800- 2680

SIZE	ASME 800					
	Bolted Bonnet			Welded Bonnet		
	Standard Bore			Standard Bore		
in	WT	LB	CV	WT	LB	CV
mm	WE	KG		WE	KG	
½	3.1		1.5	2.6		1.5
13	1.4			1.2		
¾	4.2		2.7	2.6		2.7
19	1.9			1.2		
1	5.7		5.1	4.4		5.1
25	2.6			2		
1¼	9.3		9.1	7.3		9.1
32	4.2			3.3		
1½	11.7		14	11		14
38	5.3			5		
2	19.8		22.4	15.4		22.4
50	9			7		

SIZE	ASME 1500 & 1687					ASME 2500 & 2680			
	Bolted Bonnet		Welded Bonnet			Welded Bonnet			
	Standard Bore		Standard Bore			Standard Bore			
in	WT	LB	CV	WT	LB	CV	WT	LB	CV
mm	WE	KG		WE	KG		WE	KG	
½	5.7		1.5	4.4		1.5	7.7		3
13	2.6			2			3.5		
¾	5.7		2.7	4.4		2.7	7.7		3.1
19	2.6			2			3.5		
1	9.3		5.1	7.3		5.1	13.7		6
25	4.2			3.3			6.2		
1¼	11.7		9.1	9.3		9.1	22.9		10.5
32	5.3			4.2			10.4		
1½	19.8		14	15.4		14	22.9		13.5
38	9			7			10.4		
2	25.4		22.4	20.9		22.4	32.2		22.4
50	11.5			9.5			14.6		

WE = Socket Weld / Threaded Ends

WT = Weight

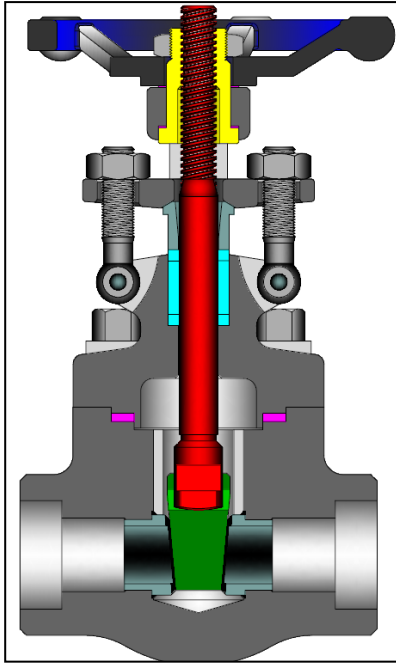
CV = Flow Coefficient

API 602 GATE VALVES

FORGED CARBON, STAINLESS STEEL OR ALLOY STEEL

1/4" - 2" (6 - 50 mm)

ASME CLASSES 150 -2680



Class	Bore	Fig. No.
150	Standard	GA01
	Full	GAL1
300	Standard	GA03
	Full	GAL3
600	Standard	GA06
	Full	GAL6
800	Standard	GA08
	Full	GAL8
1500	Standard	GA15
	Full	GAL5
1680	Standard	GA16
2500	Standard	GA25
2690	Standard	GA26

STANDARD MATERIALS (Other materials available)

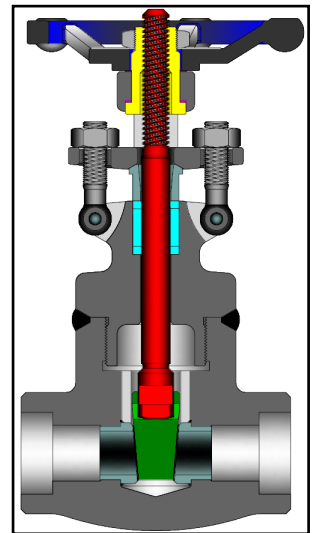
PART	MATERIALS			
Body	A105	A182 F11	A182 F22	A182F316 (1)
Bonnet	A105	A182 F11	A182 F22	A182 F316
Wedge	SST 420			A182 F316
Seat Ring	SST 410 + Stellite 6 Faced			SST 316
Stem	A182 F6a			A182 F316
Stem Bushing	A 439 Ductile NI-Resist Gr. D2			
Gland Flange	A105			Series 300 SST
Eye Bolt	A193 Gr. B7	A193 Gr. B16		A193 Gr. B8M
Eye Bolt Nut	A194 Gr. 2H	A194 Gr. 7		A194 Gr.8M
Gland	SST 420			SST 316
Packing	Graphite			PTFE
Packing Washer / Packing Spacer	SST 410			SST 316
Gasket (2)	Spiral Wound SST with Graphite		Spiral Wound SST with PTFE	
Hand Wheel	Malleable Iron or Steel			
Hand Wheel Nut	Malleable Iron or Steel			
Key	Steel			
Body / Bonnet Bolting (2)	A193 Gr. B7	A193 Gr. B16		A193 Gr. B8M
Identification Plate	Series 300 SST			

1. Threaded and weld end valve bodies A182 F316L
2. Welded bonnet design also available.

Design Specifications

Item	Applicable Specification
Wall thickness	API 602
Pressure - temperature ratings	ASME B16.34
General valve design	API 602 & B16.34
End to End dimensions	ASME B16.10
Flange design	ASME B16.5
Thread design	ASME B1.20.1
Butt Weld design	ASME B16.25
Socket Weld design	ASME B16.11
Materials	ASTM

NOTE: See page 43 for flow, safety and maintenance information.



Welded Bonnet Design

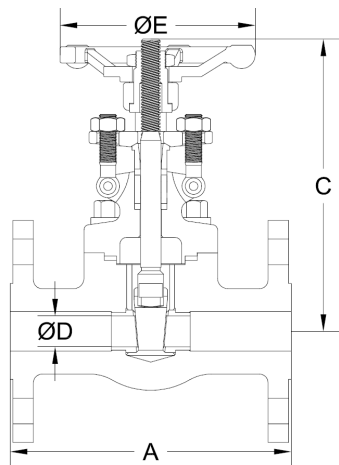
DESIGN FEATURES:

- Wedges are accurately guided thru the entire stroke.
- Standard trim is stellite faced seat rings, 13% chrome wedge seat surfaces, and 13% chrome stem (API trim 8). Other trims available on request.
- Seat faces lapped for smooth finish and superior sealing.
- Stems are non-rotating with surface finish to maximize packing seal for low fugitive emissions.
- Each valve is shell, seat and backseat pressure tested per industry standard API 598.
- Gland is two piece gland / gland flange design for optimal alignment and uniform packing compression.
- End Flanges have the following raised faces per ASME B16.5:
 - Classes 150-300: 1/16" (2mm).
 - Classes 600: 1/4" (7mm).
- Weld ends are available per ASME B16.25/B16.11 or per customer's specification.
- Extended body ends available on gate valves.
- Other available options as follows:
 - » Alternate valve materials such as chrome and stainless steel alloys
 - » Alternate trim materials
 - » NACE service
 - » Special cleaning for applications such as oxygen or chlorine
 - » Other options available as specified.

GATE VALE DIMENSIONS CLASS 150 - 800

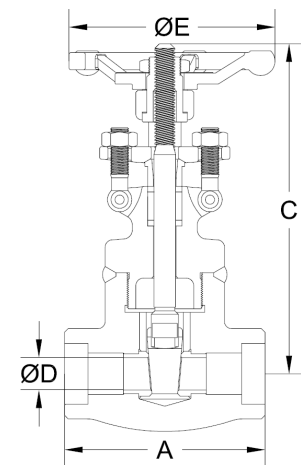
SIZE	ASME 150				ASME 300				ASME 600			
	Bolted Bonnet				Bolted Bonnet				Bolted Bonnet			
	Standard Bore				Standard Bore				Standard Bore			
in	A	C	D	E	A	C	D	E	A	C	D	E
mm	FE				FE				FE			
½	4.25	6	0.5	3.9	5.5	6	0.5	3.9	6.5	6	0.5	3.9
13	108	153	13	100	140	153	13	100	165	153	13	100
¾	4.62	6	0.5	3.9	6	6	0.5	3.9	7.5	6	0.5	3.9
19	117	153	13	100	152	153	13	100	190	153	13	100
1	5	7.3	0.71	4.9	6.5	7.3	0.71	4.9	8.5	7.3	0.71	4.9
25	127	185	18	125	165	185	18	125	216	185	18	125
1¼	5.5	8.7	0.94	6.3	7	8.7	0.94	6.3	9	8.7	0.94	6.3
32	140	222	24	160	178	222	24	160	229	222	24	160
1½	6.5	9.4	1.14	6.3	7.5	9.4	1.14	6.3	9.5	9.4	1.14	6.3
38	165	240	29	160	190	240	29	160	241	240	29	160
2	7	11	1.46	7.1	8.5	11	1.46	7.1	11.5	11	1.46	7.1
50	178	279	37	180	216	279	37	180	292	279	37	180

SIZE	ASME 800															
	Bolted Bonnet								Welded Bonnet							
	Standard Bore				Full Bore				Standard Bore				Full Bore			
in	A	C	D	E	A	C	D	E	A	C	D	E	A	C	D	E
mm	WE				WE				WE				WE			
¼	3.11	5.9	0.31	3.9	-	-	-	-	3.11	6.2	0.31	3.9	-	-	-	-
6	79	149	8	100	-	-	-	-	79	157	8	100	-	-	-	-
3/8	3.11	5.9	0.39	3.9	-	-	-	-	3.11	6.2	0.39	3.9	-	-	-	-
10	79	149	10	100	-	-	-	-	79	157	10	100	-	-	-	-
½	3.11	6	0.5	3.9	3.62	6	0.5	3.9	3.11	6.3	0.5	3.9	3.62	6.3	0.5	3.9
13	79	153	13	100	92	153	13	100	79	161	13	100	92	161	13	100
¾	3.62	6	0.5	3.9	4.37	7.3	0.71	4.9	3.62	6.3	0.5	3.9	4.37	7.5	0.71	4.9
19	92	153	13	100	111	185	18	125	92	161	13	100	111	190	18	125
1	4.37	7.3	0.71	4.9	4.72	8.7	0.94	6.3	4.37	7.5	0.71	4.9	4.72	8.7	0.94	6.3
25	111	185	18	125	120	222	24	160	111	190	18	125	120	220	24	160
1¼	4.72	8.7	1.14	6.3	4.72	9.4	1.14	6.3	4.72	8.7	1.14	6.3	4.72	9.4	1.14	6.3
32	120	222	29	160	120	240	29	160	120	220	29	160	120	240	29	160
1½	4.72	9.4	1.14	6.3	5.51	11	1.46	7.1	4.72	9.4	1.14	6.3	5.51	11	1.46	7.1
38	120	240	29	160	140	279	37	180	120	240	29	160	140	279	37	180
2	5.51	11	1.46	7.1	6.3	13.1	1.89	7.9	5.51	11	1.46	7.1	6.3	12.6	1.89	7.9
50	140	279	37	180	160	333	48	200	140	279	37	180	160	319	48	200



Bolted Bonnet Flanged Ends Design

WE = Socket Weld / Threaded Ends
FE = Flanged ends
C = Center to top open



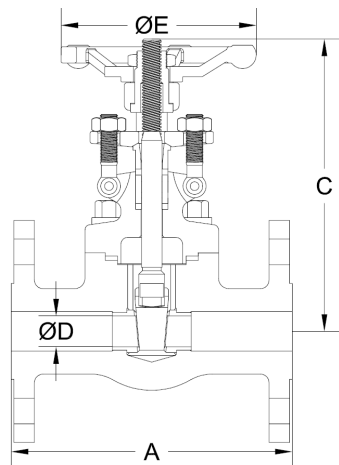
Welded Bonnet Socket Weld Ends Design

ADDITIONAL SIZES, MATERIALS AND CLASSES AVAILABLE UPON REQUEST.

GATE VALVE DIMENSIONS (CLASS 1500 - 2680)

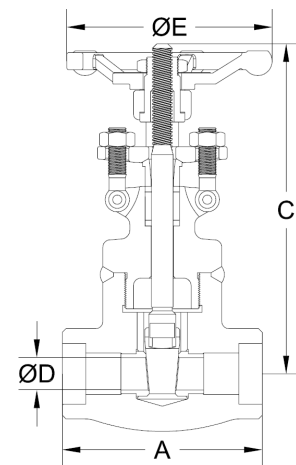
SIZE	ASME 1500 & 1690																
	Bolted Bonnet								Welded Bonnet								
	Standard Bore				Full Bore				Standard Bore				Full Bore				
in	A		C	D	E	A	C	D	E	A	C	D	E	A	C	D	E
mm	FE	WE															
¼	-	3.11	6.9	0.31	3.9	-	-	-	-	3.11	6.9	0.31	3.9	-	-	-	-
6	-	79	175	8	100	-	-	-	-	79	175	8	100	-	-	-	-
3/8	-	3.62	7	0.5	3.9	-	-	-	-	3.62	6.9	0.5	3.9	-	-	-	-
10	-	92	178	13	100	-	-	-	-	92	175	13	100	-	-	-	-
½	8.5	3.62	7.1	0.5	4.9	4.37	7.1	0.5	4.9	3.62	7.1	0.5	4.9	4.37	7.1	0.5	4.9
13	216	92	181	13	125	111	181	13	125	92	181	13	125	111	181	13	125
¾	9	4.37	7.1	0.5	4.9	4.72	8.6	0.71	6.3	4.37	7.1	0.5	4.9	4.72	8.6	0.71	6.3
19	229	111	181	13	125	120	218	18	160	111	181	13	125	120	218	18	160
1	10	4.72	8.6	0.71	6.3	4.72	9.3	0.94	6.3	4.72	8.6	0.71	6.3	4.72	9.3	0.94	6.3
25	254	120	218	18	160	120	237	24	160	120	218	18	160	120	237	24	160
1¼	11	4.72	9.3	0.94	6.3	5.51	10.8	1.14	7.1	4.72	9.3	0.94	6.3	5.51	10.8	1.14	7.1
32	279	120	237	24	160	140	274	29	180	120	237	24	160	140	274	29	180
1½	12	5.51	10.8	1.14	7.1	6.3	12.6	1.46	7.9	5.51	10.8	1.14	7.1	6.3	12.6	1.46	7.9
38	305	140	274	29	180	160	319	37	200	140	274	29	180	160	319	37	200
2	14.5	6.3	12.6	1.46	7.9	9.1	13.6	1.89	7.9	6.3	12.6	1.46	7.9	9.1	13.6	1.89	7.9
50	368	160	319	37	200	230	345	48	200	160	319	37	200	230	345	48	200

SIZE	ASME 2500 & 2680									
	Bolted Bonnet				Welded Bonnet					
	Standard Bore				Standard Bore					
in	A		C	D	E	A		C	D	E
mm	WE	WE				WE	WE			
½	5.91	11.2	0.55	6.3	5.91	10	0.55	6.3		
13	150	284	14	160	150	253	14	160		
¾	5.91	11.2	0.55	6.3	5.91	10	0.55	6.3		
19	150	284	14	160	150	253	14	160		
1	6.69	12.9	0.75	7.9	6.69	11.5	0.75	7.9		
25	170	327	19	200	170	291	19	200		
1¼	7.87	14.7	1	9.8	7.87	13.3	1	9.8		
32	200	374	25	250	200	339	25	250		
1½	7.87	14.8	1.1	9.8	7.87	13.5	1.1	9.8		
38	200	377	28	250	200	342	28	250		
2	9.84	17.1	1.38	11.8	9.84	15.7	1.38	11.8		
50	250	434	35	300	250	398	35	300		



Bolted Bonnet Flanged Ends Design

WE = Socket Weld / Threaded Ends
FE = Flanged ends
C = Center to top open



Welded Bonnet Socket Weld Ends Design

ADDITIONAL SIZES, MATERIALS AND CLASSES AVAILABLE UPON REQUEST.

API 602 GATE VALVES

FORGED CARBON, STAINLESS STEEL OR ALLOY STEEL

1/4" - 2" (6 - 50 mm)

ASME CLASSES 150 - 2680

SIZE	ASME 150			ASME 300			ASME 600			ASME 800											
	Bolted Bonnet			Bolted Bonnet			Bolted Bonnet			Bolted Bonnet						Welded Bonnet					
	Standard Bore			Standard Bore			Standard Bore			Standard Bore			Full Bore			Standard Bore			Full Bore		
in	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV
mm	FE	KG		FE	KG		FE	KG		FE	KG		WE	KG		WE	KG		WE	KG	
1/4	-	-	-	-	-	-	-	-	4.2	5	-	-	3.7	5	-	-	-	-			
6	-	-	-	-	-	-	-	-	1.9	-	-	-	1.7	-	-	-	-	-			
3/8	-	-	-	-	-	-	-	-	4.2	8	-	-	3.7	8	-	-	-	-			
10	-	-	-	-	-	-	-	-	1.9	-	-	-	1.7	-	-	-	-	-			
1/2	6.6	13	-	7.9	13	-	9.3	13	4.4	13	7.3	13	4	13	7.1	13	-	-			
13	3	-	-	3.6	-	-	4.2	-	2	-	3.3	-	1.8	-	3.2	-	-	-			
3/4	7.7	13	-	10.8	13	-	12.8	13	4.9	13	8.4	25	4.4	13	8.2	25	-	-			
19	3.5	-	-	4.9	-	-	5.8	-	2.2	-	3.8	-	2	-	3.7	-	-	-			
1	12.1	30	-	15.4	30	-	19.4	30	7.9	30	12.8	45	7.5	30	12.6	45	-	-			
25	5.5	-	-	7	-	-	8.8	-	3.6	-	5.8	-	3.4	-	5.7	-	-	-			
1 1/4	15	70	-	20.7	70	-	26.7	70	13.7	70	14.8	70	11.7	70	14.6	70	-	-			
32	6.8	-	-	9.4	-	-	12.1	-	6.2	-	6.7	-	5.3	-	6.6	-	-	-			
1 1/2	22.9	70	-	29.3	70	-	34.4	70	13.7	70	22.7	110	13.2	70	22.5	110	-	-			
38	10.4	-	-	13.3	-	-	15.6	-	6.2	-	10.3	-	6	-	10.2	-	-	-			
2	31.7	120	-	39.7	80	-	43	120	21.4	120	33.5	220	20.9	120	33.3	220	-	-			
50	14.4	-	-	18	-	-	19.5	-	9.7	-	15.2	-	9.5	-	15.1	-	-	-			
SIZE	ASME 1500 & 1690												ASME 2500 & 2680								
	Bolted Bonnet						Welded Bonnet						Bolted Bonnet			Welded Bonnet					
	Standard Bore			Full Bore			Standard Bore			Full Bore			Standard Bore			Standard Bore					
in	WT	LB	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	
mm	FE	KG	WE	KG		WE	KG		WE	KG		WE	KG		WE	KG		WE	KG		WE
1/4	-	-	6.6	-	5	-	-	-	6.2	5	-	-	-	-	-	-	-	-	-		
6	-	-	3	-	-	-	-	-	2.8	-	-	-	-	-	-	-	-	-	-		
3/8	-	-	7.1	-	13	-	-	-	6.6	13	-	-	-	-	-	-	-	-	-		
10	-	-	3.2	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-		
1/2	15.9	-	7.7	-	13	9.5	-	13	7.3	-	13	9.3	-	13	21.6	-	20	15	-	20	
13	7.2	-	3.5	-	-	4.3	-	-	3.3	-	-	4.2	-	-	9.8	-	-	6.8	-	-	
3/4	25.4	-	8.8	-	13	13.9	-	25	8.2	-	13	13.7	-	25	22	-	20	15.4	-	20	
19	11.5	-	4	-	-	6.3	-	-	3.7	-	-	6.2	-	-	10	-	-	7	-	-	
1	34.4	-	13.2	-	25	16.1	-	45	12.6	-	25	15.9	-	45	49.6	-	25	22	-	25	
25	15.6	-	6	-	-	7.3	-	-	5.7	-	-	7.2	-	-	22.5	-	-	10	-	-	
1 1/4	35.7	-	15.4	-	45	24.7	-	70	14.8	-	45	24.5	-	70	69.9	-	55	43.4	-	55	
32	16.2	-	7	-	-	11.2	-	-	6.7	-	-	11.1	-	-	31.7	-	-	19.7	-	-	
1 1/2	49.8	-	23.8	-	70	35.1	-	110	23.1	-	70	34.8	-	110	70.5	-	70	57.3	-	70	
38	22.6	-	10.8	-	-	15.9	-	-	10.5	-	-	15.8	-	-	32	-	-	26	-	-	
2	62.2	-	34.2	-	120	36.4	-	220	33.5	-	120	36.2	-	220	83.8	-	120	69.9	-	120	
50	28.2	-	15.5	-	-	16.5	-	-	15.2	-	-	16.4	-	-	38	-	-	31.7	-	-	

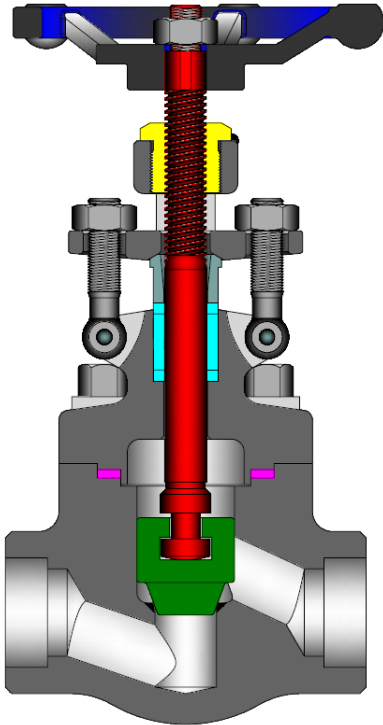
FE = Flanged Ends
WE = Socket Weld / Threaded Ends

WT = Weight
CV = Flow Coefficient

API 602 GLOBE VALVES

FORGED CARBON, STAINLESS STEEL OR ALLOY STEEL

1/4" - 2" (6 - 50 mm), ASME CLASSES 150 - 2680



STANDARD MATERIALS (Other materials available)

PART	MATERIALS			
	Body	A105 + Stellite 6 Faced	A182 F11 + Stellite 6 Faced	A182 F22 + Stellite 6 Faced
Bonnet	A105	A182 F11	A182 F22	A182 F316
Disc	SST 420			A182 F316
Stem	A182 F6a			A182 F316
Gland Flange	A105			A182 F316
Eye Bolt	A193 Gr. B7	A193 Gr. B16		A193 Gr. B8M
Eye Bolt Nut	A194 Gr. 2H	A194 Gr. 7		A194 Gr. 8M
Gland	SST 420			Series 300 SST
Packing	Graphite			PTFE
Gasket (2)	Spiral Wound SST with Graphite			Spiral Wound SST with PTFE
Hand Wheel	Malleable Iron or Steel			
Hand Wheel Nut	Malleable Iron or Steel			
Body / Bonnet Bolting (2)	A193 Gr. B7	A193 Gr. B16		A193 Gr. B8M
Identification Plate	Series 300 SST			

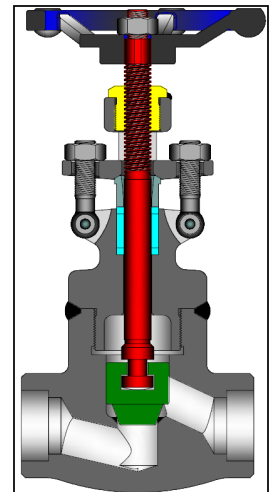
1. Threaded and weld end valve bodies A182 F316L
2. Welded bonnet design also available.

Class	Bore	Fig. No.
150	Standard	GL01
	Full	GLL1
300	Standard	GL03
	Full	GLL3
600	Standard	GL06
	Full	GLL6
800	Standard	GL08
	Full	GLL8
1500	Standard	GL15
	Full	GLL5
1680	Standard	GL16
2500	Standard	GL25
2690	Standard	GL26

NOTE: See page 43 for flow, safety and maintenance information.

Design Specifications

Item	Applicable Specification
Wall thickness	API 602
Pressure - temperature ratings	ASME B16.34
General valve design	API 602 & B16.34
End to End dimensions	ASME B16.10
Flange design	ASME B16.5
Thread design	ASME B1.20.1
Butt Weld design	ASME B16.25
Socket Weld design	ASME B16.11
Materials	ASTM



Welded Bonnet Design

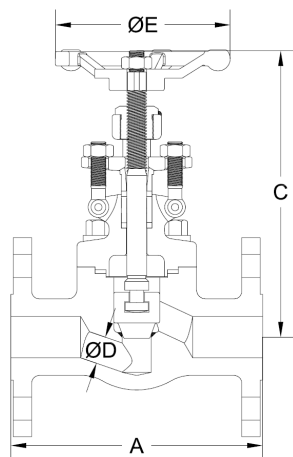
DESIGN FEATURES:

- Standard trim is stellite faced seats integral to the body, 13% chrome disc, and 13% chrome stem (API trim 8). Other trims available on request.
- Wall thickness per heavy wall API 602 requirements.
- Seat faces lapped for smooth finish and superior sealing.
- Swivel disc for optimal seating and longer seat life are non-rotating.
- Stems of hand wheel operated design are rotating / rising design.
- Each valve is shell, seat and backseat pressure tested per industry standard API 598.
- Gland is two piece gland / gland flange design for optimal alignment and uniform packing compression.
- End Flanges have the following raised faces per ASME B16.5:
 - Classes 150-300: 1/16" (2mm)
 - Classes 600: 1/4" (7mm)
- Weld ends are available per ASME B16.25/B16.11 or per customer's specification.
- Other available options as follows:
 - » Alternate valve materials such as chrome and stainless steel alloys
 - » Alternate trim materials
 - » NACE service
 - » Special cleaning for applications such as oxygen or chlorine
 - » Other options available as specified

GLOBE VALVE DIMENSIONS CLASS 150 - 800

SIZE	ASME 150				ASME 300				ASME 600			
	Bolted Bonnet				Bolted Bonnet				Bolted Bonnet			
	Standard Bore				Standard Bore				Standard Bore			
in	A	C	D	E	A	C	D	E	A	C	D	E
mm	FE				FE				FE			
½	4.25	6	0.39	3.9	6	6.2	0.39	3.9	6.5	6.2	0.39	3.9
13	108	153	10	100	152	158	10	100	165	158	10	100
¾	4.62	6.2	0.5	3.9	7	6.2	0.5	3.9	7.5	6.2	0.5	3.9
19	117	158	13	100	178	158	13	100	190	158	13	100
1	5	7.6	0.69	4.9	8	7.6	0.69	4.9	8.5	7.6	0.69	4.9
25	127	192	18	125	203	192	18	125	216	192	18	125
1¼	5.5	8.9	0.91	6.3	8.5	8.9	0.91	6.3	9	5	0.91	6.3
32	140	227	23	160	216	227	23	160	229	127	23	160
1½	6.5	9.4	1.12	6.3	9	9.4	1.12	6.3	9.5	9.4	1.12	6.3
38	165	240	29	160	229	240	29	160	241	240	29	160
2	8	11	1.38	7.1	10.5	11	1.38	7.1	11.5	11	1.38	7.1
50	203	279	35	180	267	279	35	180	292	279	35	180

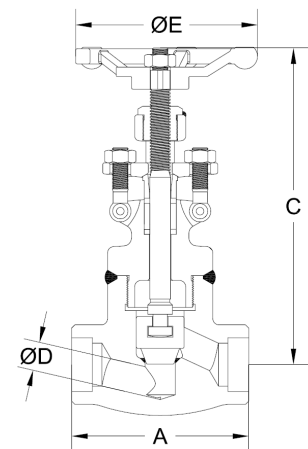
SIZE	ASME 800															
	Bolted Bonnet								Welded Bonnet							
	Standard Bore				Full Bore				Standard Bore				Full Bore			
in	A	C	D	E	A	C	D	E	A	C	D	E	A	C	D	E
mm	WE				WE				WE				WE			
¼	3.11	6.1	0.26	3.9	-	-	-	-	3.11	6.1	0.26	3.9	-	-	-	-
6	79	154	7	100	-	-	-	-	79	154	7	100	-	-	-	-
3/8	3.11	6.1	0.39	3.9	-	-	-	-	3.11	6.1	0.39	3.9	-	-	-	-
10	79	154	10	100	-	-	-	-	79	154	10	100	-	-	-	-
½	3.11	6.2	0.39	3.9	3.62	6.2	0.5	6.3	3.11	6.1	0.39	3.9	3.62	6.2	0.5	3.9
13	79	158	10	100	92	158	13	160	79	154	10	100	92	158	13	100
¾	3.62	6.2	0.5	3.9	4.37	7.6	0.69	4.9	3.62	6.2	0.5	3.9	4.37	7.6	0.69	4.9
19	92	158	13	100	111	192	18	125	92	158	13	100	111	192	18	125
1	4.37	7.6	0.69	4.9	4.72	8.9	0.91	6.3	4.37	7.6	0.69	4.9	4.72	8.9	0.91	6.3
25	111	192	18	125	120	227	23	160	111	192	18	125	120	227	23	160
1¼	4.72	8.9	0.91	6.3	5.98	9.4	1.12	6.3	4.72	8.9	0.91	6.3	5.98	9.4	1.12	6.3
32	120	227	23	160	152	240	29	160	120	227	23	160	152	240	29	160
1½	5.98	9.4	1.12	6.3	6.77	11	1.4	7.1	5.98	9.4	1.12	6.3	6.77	11	1.42	7.1
38	152	240	29	160	172	279	36	180	152	240	29	160	172	279	36	180
2	6.77	11	1.38	7.1	8.66	12.8	1.85	7.9	6.77	11	1.38	7.1	8.66	12.8	1.85	7.9
50	172	279	35	180	220	325	47	200	172	279	35	180	220	325	47	200



Bolted Bonnet Flanged Ends Design

WE = Socket Weld / Threaded ends
FE = Flanged Ends

C = Center to top open



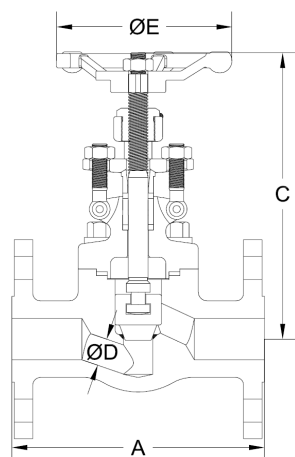
Welded Bonnet Socket Weld Ends Design

ADDITIONAL SIZES, MATERIALS AND CLASSES AVAILABLE UPON REQUEST.

GLOBE VALVE DIMENSIONS CLASS 1500 - 2680

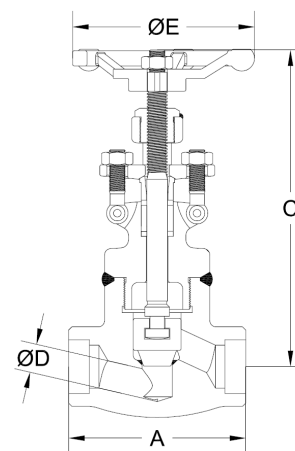
SIZE	ASME 1500 & 1690																
	Bolted Bonnet								Welded Bonnet								
	Standard Bore				Full Bore				Standard Bore				Full Bore				
in mm	A		C	D	E	A WE	C	D	E	A WE	C	D	E	A WE	C	D	E
	FE	WE															
¼	-	3.11	6.9	0.26	3.9	-	-	-	-	3.11	6.2	0.39	3.9	-	-	-	-
6	-	79	175	7	100	-	-	-	-	79	158	10	100	-	-	-	-
3/8	-	3.62	7	0.39	4.9	-	-	-	-	3.62	6.2	0.5	3.9	-	-	-	-
10	-	92	178	10	125	-	-	-	-	92	158	13	100	-	-	-	-
½	8.5	3.62	7.4	0.39	4.9	4.37	7.4	0.5	4.9	4.37	7.4	0.39	4.9	4.37	7.4	0.5	4.9
13	216	92	187	10	125	111	187	13	125	111	187	10	125	111	187	13	125
¾	9	4.37	7.4	0.5	4.9	4.72	8.9	0.69	6.3	4.37	7.4	0.5	4.9	4.72	8.9	0.69	6.3
19	229	111	187	13	125	120	227	18	160	111	187	13	125	120	227	18	160
1	10	4.72	8.9	0.69	6.3	5.98	9.5	0.91	6.3	4.72	8.9	0.69	6.3	5.98	9.5	0.91	6.3
25	254	120	227	18	160	152	242	23	160	120	227	18	160	152	242	23	160
1¼	11	5.98	9.5	0.91	6.3	6.77	10.9	1.12	7.1	5.98	9.5	0.91	6.3	6.77	10.9	1.12	7.1
32	279	152	242	23	160	172	278	29	180	152	242	23	160	172	278	29	180
1½	12	6.77	10.9	1.12	7.1	8.66	12.8	1.38	7.9	6.77	10.9	1.12	7.1	8.66	12.8	1.38	7.9
38	305	172	278	29	180	220	325	35	200	172	278	29	180	220	325	35	200
2	14.5	8.66	12.8	1.38	7.9	9.84	14	1.85	7.9	8.66	12.8	1.38	7.9	9.84	14	1.85	7.9
50	368	220	325	35	200	250	355	47	200	220	325	35	200	250	355	47	200

SIZE	ASME 2500 & 2680								
	Bolted Bonnet				Welded Bonnet				
	Standard Bore				Standard Bore				
in mm	A		C	D	E	A WE	C	D	E
	WE								
½	5.91		11.5	0.43	6.3	5.91	9.8	0.55	6.3
13	150		293	11	160	150	249	14	160
¾	5.91		11.5	0.43	6.3	5.91	9.8	0.55	6.3
19	150		293	11	160	150	249	14	160
1	6.69		13.5	0.55	7.9	6.69	11.5	0.75	7.9
25	170		344	14	200	170	292	19	200
1¼	7.87		15.1	0.63	9.8	7.87	12.9	0.98	9.8
32	200		383	16	250	200	327	25	250
1½	7.87		15.1	0.98	9.8	7.87	12.9	1.1	9.8
38	200		383	25	250	200	327	28	250
2	9.84		17.4	1.1	11.8	9.84	15	1.38	11.8
50	250		442	28	300	250	381	35	300



Bolted Bonnet Flanged Ends Design

WE = Socket Weld / Threaded ends
FE = Flanged Ends
C = Center to top open



Welded Bonnet Socket Weld Ends Design

ADDITIONAL SIZES, MATERIALS AND CLASSES AVAILABLE UPON REQUEST.

API 602 GLOBE VALVES

FORGED CARBON, STAINLESS STEEL OR ALLOY STEEL

1/4" - 2" (6 - 50mm), ASME CLASSES 150 - 2680

SIZE	ASME 150			ASME 300			ASME 600			ASME 800											
	Bolted Bonnet			Bolted Bonnet			Bolted Bonnet			Bolted Bonnet						Welded Bonnet					
	Standard Bore			Standard Bore			Standard Bore			Standard Bore			Full Bore			Standard Bore			Full Bore		
in	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV
mm	FE	KG		FE	KG		FE	KG		WE	KG		WE	KG		WE	KG		WE	KG	
¼	-	-	-	-	-	-	-	-	4.6	0.7	-	-	4.4	0.7	-	-	-	-			
6	-	-	-	-	-	-	-	-	2.1	-	-	-	2	-	-	-	-	-			
3/8	-	-	-	-	-	-	-	-	4.6	1.5	-	-	4.4	1.5	-	-	-	-			
10	-	-	-	-	-	-	-	-	2.1	-	-	-	2	-	-	-	-	-			
½	9.9	1.5	10.6	1.5	12.3	1.5	4.4	1.5	4.9	2.6	4.2	1.5	4.6	2.6	-	-	-	-			
13	4.5	-	4.8	-	5.6	-	2	-	2.2	-	1.9	-	2.1	-	-	-	-	-			
¾	15.2	2.7	17	2.7	17.2	2.7	4.9	2.7	8.4	4.9	4.6	2.7	8.2	4.9	-	-	-	-			
19	6.9	-	7.7	-	7.8	-	2.2	-	3.8	-	2.1	-	3.7	-	-	-	-	-			
1	21.6	5.1	24.3	5.1	27.6	5.1	5.5	5.1	12.1	8.9	8.2	5.1	11.9	8.9	-	-	-	-			
25	9.8	-	11	-	12.5	-	2.5	-	5.5	-	3.7	-	5.4	-	-	-	-	-			
1¼	29.8	9.1	37	9.1	37.5	9.1	12.1	9.1	15.4	13.7	11.9	9.1	15.2	13.7	-	-	-	-			
32	13.5	-	16.8	-	17	-	5.5	-	7	-	5.4	-	6.9	-	-	-	-	-			
1½	43	14	46.5	14	51.8	14	15.4	14	25.4	21.9	15.2	14	25.1	21.9	-	-	-	-			
38	19.5	-	21.2	-	23.5	-	7	-	11.5	-	6.9	-	11.4	-	-	-	-	-			
2	61.7	22.4	68	22.4	71.9	22.4	25.4	22.4	26.5	40	25.1	22.4	26.2	40	-	-	-	-			
50	28	-	31	-	32.6	-	11.5	-	12	-	11.4	-	11.9	-	-	-	-	-			

SIZE	ASME 1500 & 1687												ASME 2500 & 2680							
	Bolted Bonnet						Welded Bonnet						Bolted Bonnet				Welded Bonnet			
	Standard Bore			Full Bore			Standard Bore			Full Bore			Standard Bore		Standard Bore		Standard Bore		Standard Bore	
in	WT	LB	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV
mm	FE	KG	WE	KG	CV	WE	KG	CV	WE	KG	CV	WE	KG	CV	WE	KG	CV	WE	KG	CV
¼	-	-	6.6	-	0.7	-	-	-	6.2	-	0.7	-	-	-	-	-	-	-	-	-
6	-	-	3	-	-	-	-	-	2.8	-	-	-	-	-	-	-	-	-	-	-
3/8	-	-	7.7	-	1.5	-	-	-	6.6	-	1.5	-	-	-	-	-	-	-	-	-
10	-	-	3.5	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-
½	24.3	-	7.7	-	1.5	8.8	-	1.5	7.3	-	1.5	8.6	-	1.5	23.8	-	1.8	16.1	-	3
13	11	-	3.5	-	-	4	-	-	3.3	-	-	3.9	-	-	10.8	-	-	7.3	-	-
¾	29.1	-	8.8	-	2.7	13.9	-	2.7	8.4	-	2.7	13.7	-	2.7	24.3	-	1.9	18.7	-	3.1
19	13.2	-	4	-	-	6.3	-	-	3.8	-	-	6.2	-	-	11	-	-	8.5	-	-
1	38.4	-	13.9	-	5.1	17.6	-	5.1	13.4	-	5.1	17.4	-	5.1	26.8	-	3.2	27.6	-	6
25	17.4	-	6.3	-	-	8	-	-	6.1	-	-	7.9	-	-	12.1	-	-	12.5	-	-
1¼	41.9	-	17.6	-	9.1	27.6	-	9.1	17.2	-	9.1	27.3	-	9.1	47.8	-	4.3	45.6	-	10.5
32	19	-	8	-	-	12.5	-	-	7.8	-	-	12.4	-	-	21.7	-	-	20.7	-	-
1½	54	-	27.6	-	14	43	-	14	27.1	-	14	42.8	-	14	48.5	-	10.7	46.3	-	13.5
38	24.5	-	12.5	-	-	19.5	-	-	12.3	-	-	19.4	-	-	22	-	-	21	-	-
2	85.5	-	43	-	22.4	44.1	-	22.4	42.5	-	22.4	43.9	-	22.4	81.6	-	14.2	79.4	-	22.4
50	38.8	-	19.5	-	-	20	-	-	19.3	-	-	19.9	-	-	37	-	-	36	-	-

FE = Flanged Ends
WE = Socket Weld / Threaded Ends

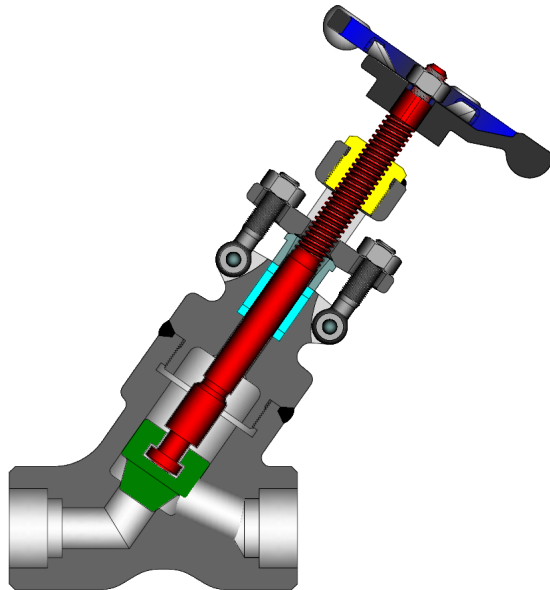
WT = Weight
CV = Flow Coefficient

API 602 Y-PATTERN GLOBE VALVES

FORGED CARBON, STAINLESS STEEL OR ALLOY STEEL

1/4" - 2" (6 - 50 mm)

ASME CLASSES 800 - 2680



STANDARD MATERIALS (Other materials available)

PART	MATERIALS			
Body	A105 + Stellite 6 Faced	A182 F11 + Stellite 6 Faced	A182 F22 + Stellite 6 Faced	A182 F316 (1)
Bonnet	A105	A182 F11	A182 F22	A182 F316
Disc	SST 420			A182 F316
Stem	A182 F6a			A182 F316
Gland Flange	A105			A182 F316
Eye Bolt	A193 Gr. B7	A193 Gr. B16		A193 Gr. B8M
Eye Bolt Nut	A194 Gr. 2H	A194 Gr. 7		A194 Gr. 8M
Gland	SST 420			Series 300 SST
Packing	Graphite			PTFE
Hand Wheel	Malleable Iron or Steel			
Hand Wheel Nut	Malleable Iron or Steel			
Identification Plate	Series 300 SST			

1. Threaded and weld end valve bodies A182 F316L

Class	Bore	Fig. No.
800	Standard	GY08
	Full	GYL8
1500	Standard	GY15
	Full	GYL5
1680	Standard	GY16
2500	Standard	GY25
2690	Standard	GY26

Design Specifications

Item	Applicable Specification
Wall thickness	API 602
Pressure - temperature ratings	ASME B16.34
General valve design	API 602 & B16.34
End to End dimensions	ASME B16.10
Flange design	ASME B16.5
Thread design	ASME B1.20.1
Butt Weld design	ASME B16.25
Socket Weld design	ASME B16.11
Materials	ASTM

DESIGN FEATURES:

- Standard trim is stellite faced seat integral to the body, 13% chrome disc, and 13% chrome stem (API trim 8). Other trims available on request.
- Wall thickness per heavy wall API 602 requirements.
- Seat faces lapped for smooth finish and superior sealing.
- Swivel disc for optimal seating and longer seat life are non-rotating.
- Stems of hand wheel operated design are rotating / rising design.
- Each valve is shell, seat and backseat pressure tested per industry standard API 598.
- Gland is two piece gland / gland flange design for optimal alignment and uniform packing compression.
- End Flanges have the following raised faces per ASME B16.5:
 - Classes 150-300: 1/16" (2mm)
 - Classes 600: 1/4" (7mm)
- Weld ends are available per ASME B16.25/B16.11 or per customer's specification.
- Other available options as follows:
 - » Alternate valve materials such as chrome and stainless steel alloys
 - » Alternate trim materials.
 - » NACE service.
 - » Special cleaning for applications such as oxygen or chlorine.
 - » Other options available as specified.

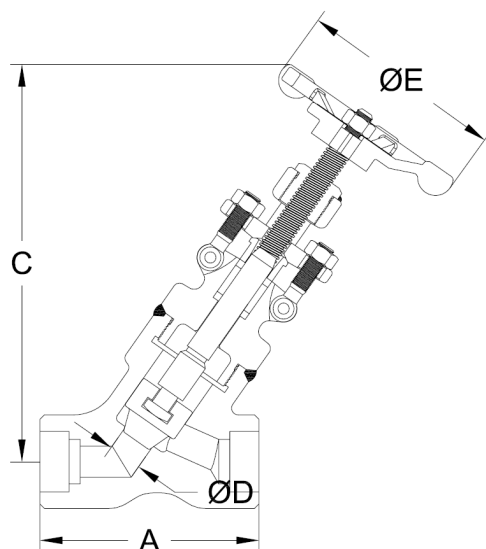
NOTE: See page 43 for flow, safety and maintenance information.

Y-PATTERN GLOBE VALVE DIMENSIONS

CLASS 800 - 2680

SIZE	ASME 800											
	Bolted Bonnet						Welded Bonnet					
	Standard Bore						Standard Bore					
in	A	C	D	E	A	C	D	E	A	C	D	E
mm	WE				WE							
½	4.17	6.7	0.39	3.9	4.17	6.5	0.39	3.9	4.17	6.5	0.39	3.9
13	106	170	10	100	106	166	10	100	106	166	10	100
¾	4.17	6.7	0.5	3.9	4.17	6.5	0.5	3.9	4.17	6.5	0.5	3.9
19	106	170	13	100	106	166	13	100	106	166	13	100
1	4.72	8	0.69	4.9	4.72	7.8	0.69	4.9	4.72	7.8	0.69	4.9
25	120	202	18	125	120	197	18	125	120	197	18	125
1¼	5.98	9.8	0.91	6.3	5.98	9.6	0.91	6.3	5.98	9.6	0.91	6.3
32	152	249	23	160	152	243	23	160	152	243	23	160
1½	5.98	9.8	1.12	6.3	5.98	9.6	1.12	6.3	5.98	9.6	1.12	6.3
38	152	249	29	160	152	243	29	160	152	243	29	160
2	7.09	11.1	1.38	7.1	7.09	10.7	1.38	7.1	7.09	10.7	1.38	7.1
50	180	281	35	180	180	272	35	180	180	272	35	180

SIZE	ASME 1500 & 1690								ASME 2500 & 2680			
	Bolted Bonnet				Welded Bonnet				Welded Bonnet			
	Standard Bore				Standard Bore				Standard Bore			
in	A	C	D	E	A	C	D	E	A	C	D	E
mm	WE				WE							
½	4.72	7.9	0.39	4.9	4.72	7.6	0.39	4.9	5.98	9.6	0.43	6.3
13	120	200	10	125	120	192	10	125	152	243	11	160
¾	4.72	7.9	0.5	4.9	4.72	7.6	0.5	4.9	5.98	9.6	0.55	6.3
19	120	200	13	125	120	192	13	125	152	243	14	160
1	5.98	9.8	0.69	6.3	5.98	9.4	0.69	6.3	7.09	11.4	0.75	7.9
25	152	250	18	160	152	240	18	160	180	290	19	200
1¼	5.98	9.8	0.91	6.3	5.98	9.4	0.91	6.3	7.87	13.2	0.98	9.8
32	152	250	23	160	152	240	23	160	200	335	25	250
1½	7.09	11.1	1.12	7.1	7.09	10.7	1.12	7.1	7.87	13.2	1.1	9.8
38	180	283	29	180	180	273	29	180	200	335	28	250
2	7.87	12.8	1.38	7.9	7.87	12.4	1.38	7.9	9.06	15.4	1.38	11.8
50	200	324	35	200	200	316	35	200	230	390	35	300



WE = Socket Weld / Threaded Ends

C = Center to top open

ADDITIONAL SIZES, MATERIALS AND CLASSES AVAILABLE UPON REQUEST.

API 602 Y-PATTERN GLOBE VALVES

FORGED CARBON, STAINLESS STEEL OR ALLOY STEEL

1/4" - 2" (6 - 50mm), ASME CLASSES 800 - 2680

SIZE	ASME 800						ASME 1500 & 1687						ASME 2500 & 2680		
	Bolted Bonnet			Welded Bonnet			Bolted Bonnet			Welded Bonnet			Welded Bonnet		
	Standard Bore			Standard Bore			Standard Bore			Standard Bore			Standard Bore		
in	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV
mm	WE	KG		WE	KG		WE	KG		WE	KG		WE	KG	
½	4.4		3.3	3.3		3.3	9.3		3.3	7.7		3.3	9.9		4
13	2			1.5			4.2			3.5			4.5		
¾	4.9		5.9	4.4		5.9	9.3		5.9	7.7		5.9	15.7		6.8
19	2.2			2			4.2			3.5			7.1		
1	9.3		11.2	8.4		11.2	12.1		11.2	11		11.2	24.3		13.3
25	4.2			3.8			5.5			5			11		
1¼	12.1		20	11		20	20.7		20	19.8		20	37.7		23.1
32	5.5			5			9.4			9			17.1		
1½	20.7		30	19.8		30	28.7		30	23.1		30	37.7		30
38	9.4			9			13			10.5			17.1		
2	28.7		49	28.7		49	36.4		49	32		49	55.1		49
50	13			13			16.5			14.5			25		

FE = Flanged Ends
WE = Socket Weld / Threaded Ends

WT = Weight
CV = Flow Coefficient